

REMARKS

In response to the Office Action dated July 6, 2005, Applicants respectfully request reconsideration and withdrawal of the rejections to the claims. The indication that claims 24-35 contain allowable subject matter is noted with appreciation. In response thereto, claims 24 and 30 have been rewritten in independent form, and the claims have been amended to remove the bases for the rejections under 35 U.S.C. § 112, as discussed below.

The Office Action states that the application does not contain an Abstract of the Disclosure. However, an Abstract was provided with the Preliminary Amendment submitted May 14, 2001. In the event that the Abstract has not been entered into the application, a copy of that Abstract is being submitted herewith, on a separate sheet.

Claims 1-36 were rejected under the first paragraph of 35 U.S.C. § 112. The Office Action states that the independent claims recite "permitting some transitions amongst all possible transitions", whereas the specification only enables permitting some transitions amongst all transitions stored in a table of permitted state transitions. It is respectfully submitted that the claim language is supported by the specification, as originally filed. With reference to Figure 6b, for example, the application discloses that those transitions corresponding to cells in the table 11 which contain the value "1" are enabled, whereas all other transitions are not. The Office Action seems to be suggesting that there are other possible transitions outside of those reflected by the table. Even if that is the case, only those transitions which are explicitly enabled by the table will be permitted. In other words, if a possible transition does not have a corresponding cell within the table, it will not pass the pass at step 51 of Figure 5a, for example. Thus, it is respectfully submitted that the

specification provides an enabling disclosure of the recited feature that only some transitions are permitted amongst all possible transitions. Nevertheless, to advance the prosecution of the application, the independent claims have been amended to recite that only some transitions are permitted amongst all the transitions between any two possible states of the portable electronic object, or smart card.

Claims 1-36 were rejected under the second paragraph of 35 U.S.C. § 112. The Office Action states that the reference numbers in parentheses render the claims indefinite. It is respectfully submitted, however, that the inclusion of reference numbers in the claims is explicitly approved in M.P.E.P. §608.01(m), and has no affect on the scope of the claims. Again, however, to advance the prosecution, the reference characters have been removed from the claims, to obviate the issue.

Claims 12-36 were rejected under the second paragraph of 35 U.S.C. § 112, as allegedly omitting essential structures. The Office Action states that the feature of the object that defines the current state of the object must be recited in the claim, to identify what feature is being modified when the current state is altered. It is not apparent what structure the Examiner is referring to when he identifies "the feature of the object that defines the current state of the object". However, to remove the basis of the rejection, claims 12, 24 and 30 now recite that, if a requested transition is enabled, the state of the object is changed from the current state to a new state.

Claims 1, 2, 7, 10-17 and 36 were rejected under 35 U.S.C. § 102, on the grounds that they were considered to be anticipated by the Chan et al patent (US 6,005,942). In relevant part, this patent discusses the life cycle of a smart card, beginning at the bottom of column 11. The smart card includes an application 308 that is designated as the Card Domain. The patent discloses that the Card Domain

is the entity that is responsible for the management of the card's life cycle state (column 12, lines 9-11). The card life cycle is described as an irreversible sequence of states with increasing security. The Card Domain 308 executes and responds to commands that result in a transition in the card life cycle from one state to the next. The Card Domain maintains the current life cycle state, enforces security policies associated with each state, and controls the state transitions. (Column 12, lines 43-67).

Although the Chan patent discloses general operations relating to the life cycle of a smart card, it is respectfully submitted that it does not disclose, nor otherwise suggest, a number of the features that are recited in the claims. For example, claim 1 recites that the portable electronic object, e.g. a smart card, comprises means for controlling the transition from a first state to a second state. This control means includes a means for selectively enabling and/or inhibiting state transitions. As further recited in claim 2, the control means includes a means for checking the content of the volatile memory, the data memories and the program memories on the object "as a function of the state transition to be effected."

In an example of the invention described in the application, the memory in the card is erased during the transition from a blank card (state E1) to a tested card (state E2). Then, in the transition from state E2 to state E3 (initialized card), the contents of the memory are checked to confirm that they are still blank, i.e. that a fraudster has not left improper data in the memory.

In rejecting claim 2, the Office Action states that the Chan patent discloses a control means that checks the contents of the memories as a function of the state transition to be effected, with reference to column 12, lines 65-67, and Figures 4-6, 9

and 10. It is respectfully submitted that these portions of the patent do not disclose a means for checking the content of the memories as a function of the state transition to be effective. At column 12, lines 65-67, the Chan patent discloses that the Card Domain maintains the current life cycle state, enforces security policies and controls state transition in the card life cycle. However, it does not contain any disclosure to the effect that the control of the transition from a first state to a second state includes checking the contents of each of three types of memory as a function of the state transition to be effected. For instance, it does not disclose that the memories are checked to see if they contain valid or invalid information associated with a particular transition. Similarly, no such concept is illustrated in Figures 4-6, 9 or 10. Rather, these figures appear to be principally directed to the process of loading an application on the card, or monitoring card operations for a security breach.

To clarify the distinctions over the prior art, the subject matter of claim 2 has been incorporated into claims 1, 10 and 11. In a similar vein, the subject matter of claim 14 has been incorporated into claim 12. Since the Chan patent does not disclose that the contents of the memories, or the configuration of the card is checked as a function of a state transition to be effected, particularly for the purpose of confirming that the card has a predetermined configuration associated with that transition, it is respectfully submitted that the claims are not anticipated by the Chan patent.

Furthermore, it is respectfully submitted that the Wagner patent (US 5,301,100) and the Silberschatz et al publication, that were recited in the rejections of claims 3-6, 8 and 18-23, do not overcome this difference.

Reconsideration and withdrawal of the rejections, and allowance of all pending claims are respectfully requested.

Respectfully submitted,

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